

REMARKS

This Amendment is filed in response to the Office Action dated March 2, 2006, which has a shortened statutory period set to expire June 2, 2006. A Petition for a 1-month extension is enclosed.

Claims 1-14 and 17-25 Are Patentable Over Dye

Claim 1, as amended, recites:

A data display system implemented by configuring generic client software to resemble a portion of a display window associated with custom client software, the data display system comprising:

 a data display frame configured to display a current data record;

 a data list frame configured to display a first set of data identifiers and having a current data identifier marker for indicating a current data identifier corresponding to the current data record;

 a data display frame lock that indicates whether the data display frame contains a valid data page; and

 a data list frame lock that indicates whether the data list frame contains a valid data page,

 wherein the data display frame and the data list frame facilitate accessing server software over a wide area network, and wherein the data display frame and the data list frame are synchronized over the wide area network using the data display frame lock and the data list frame lock.

Claim 14, as amended, recites:

A method of configuring generic client software to synchronize a first frame with a second frame, the method comprising:

 creating a parent frame including the first frame and the second frame, wherein the first and second frames resemble a portion of a display window created using custom client software;

 storing a plurality of commands for the first frame and the second frame in the parent frame;

 storing a plurality of variables for the first frame and the second frame in the parent frame;

 displaying a first set of data identifiers in the first frame;

displaying a current data record in the second frame;
placing a current data record identifier next to a current data identifier corresponding to the current data record; and
storing indicators of lock states for the first frame and the second frame in the parent frame, wherein storing the indicators of lock states and the plurality of commands and variables allows synchronization of the first and second frames being sent over a wide area network.

Applicant has amended Claims 1 and 14 to merely clarify the recited data display system and method. Applicant respectfully submits that Dye fails to disclose or suggest the above-recited limitations of Claims 1 and 14. As noted above with respect to Claims 1 and 14, Applicant uses various terms of art that are known by those skilled in the art of networking. These terms include "wide area network", "server software", "custom client software", "generic client software", and "frames". To provide a meaningful basis of discussion, Applicant discusses these terms below.

Discussion of a Wide Area Network

As taught by Applicant, network applications typically refer to computer applications on a first computer that interact with other computer applications running on a second computer. Specification, paragraph [0004]. FIGURE 1 illustrates a server computer 110 with server software 115 that is coupled to a client computer 140 with custom client software 145 via a local area network 120. See, Specification, paragraph [0006]. In turn, local area network 120 is coupled to a wide area network 150. Specification, paragraph [0006]. A client computer 160 is coupled to wide area network 150, typically through a modem or another local area network. Specification, paragraph [0006]. The data bandwidth of local area network 120 is typically

between 10 and 100 megabits per second, whereas the data bandwidth between client computer 160 and server computer 110 can be much slower, e.g. 56 kilobits per second. Specification, paragraph [0006].

Discussion of Server, Custom Client, & Generic Client Software

Generally, server software 115 runs on server computer 110 to allow custom client software to access the desired data records. Specification, paragraph [0007]. On client computer 140, custom client software 145 is installed to communicate and transfer the desired data records with server software 115. Specification, paragraph [0007]. For example, if the data records are email, server software 115 is a mail server such as Microsoft Exchange and custom client software 145 is a mail client such as Microsoft Outlook. Specification, paragraph [0007]. Generic client software 165 communicates with server software 115 using industry standard protocols, such as HTML and Javascript. Specification, paragraph [0008]. Server software 115 can control generic client software to simulate some of the features of custom client software 145.

Discussion of Frames and Synchronization Issues

FIGURE 2 illustrates a simplified display window 200 from custom client software 145. FIGURE 3(a) illustrates a display window 300 from generic client software 165. Notably, display window 300 includes a data list frame 340 and a data record display frame 350. In general, each frame can be treated as a separate data page. Specification, paragraph [0027]. The use of frames 340/350 can be synchronized, thereby allowing generic client software 165 to successfully replicate features of custom client software 145 over wide area network 150.

Synchronization of these frames is difficult because of latency between the network connection between server computer 110 and client computer 160. Specification, paragraph [0030]. That is, server software 115 is generally programmed to assume that all new information from generic client software 165 is sent after receipt of the last data page sent by server software 115. Specification, paragraph [0030]. However, due to network congestion, the last data page may be delayed. Specification, paragraph [0030]. Thus, generic client software 165 (under control of an impatient user) may issue additional requests while using a data page that should have been replaced by the data page sent by server software 115. Specification, paragraph [0030].

Transfer protocol used on the wide area network can also result in loss of synchronization. Specification, paragraph [0031]. Specifically, data transmitted over the wide area network are broken up into small packets and therefore can arrive at the destination (via the wide area network) too slowly for generic client software 165 to update multiple frames without errors. Specification, paragraph [0031].

The use of parent frame 330 and its constituent components solve the latency and transfer protocol issues associated with synchronization. Specification, paragraph [0032]. For example, referring to FIGURE 5, data list frame lock 540 and data record display frame lock 550 are indicators of whether data list frame 340 and data record display frame 350, respectively, contain valid data pages. Specification, paragraph [0035]. If both data list frame lock 540 and data record display frame lock 550 are in the unlock state, then the appropriate data record from server software 115 is requested. Specification, paragraph [0036]. Otherwise, the request is placed in a command queue 530. Specification, paragraph [0036].

Dye Fails To Teach Data Display System As Recited In Claim 1

Dye teaches an integrated memory controller, which includes advanced memory, graphics, and audio processing capabilities and performs pointer-based display list video operations. Col. 2, lines 47-49. The integrated memory controller sits on the main CPU bus or a high-speed system peripheral bus. Col. 2, lines 59-62. Thus, in general, Dye teaches a client computer interacting with a video monitor. Col. 1, lines 18-21.

Therefore, Dye teaches nothing about accessing server software over a wide area network, configuring generic client software to resemble a portion of a display window associated with custom client software, or the recited data display and data list frame locks.

The Office Action cites the following passages of Dye as teaching Claim 1: col. 1, line 39, col. 18, lines 45-49, col. 23, lines 15-50, col. 42, line 27, and FIG. 3. Col. 1, lines 36-39 teach that a user program is transferred from an I/O device into a system memory. Col. 18, lines 45-49 teach that the integrated memory controller provides horizontal and vertical synchronization signals. Col. 23, lines 15-50 teach that driver software executing on the host CPU assembles and/or updates pointers in the Windows ID list, which includes a pointer for each window or object on the screen. The driver software also determines and/or updates basic information about each window or object that is new or has changed, including information about the respective window's position. The driver software also assembles and/or updates a Windows Workspace list or buffer in the system memory through the integrated memory controller, which includes a windows workspace area comprising this information for each window. Col. 42, line 27 teaches that only the memory required per user application is allocated to

store graphical data. FIG. 3 illustrates a block diagram of a computer system including an integrated memory controller.

Because none of these passages disclose or suggest Applicant's recited data display system, Applicant requests reconsideration and withdrawal of the rejection of Claim 1.

Claims 2-13 depend from Claim 1 and therefore are patentable for at least the reasons presented for Claim 1. Based on these reasons, Applicant requests reconsideration and withdrawal of the rejection of Claims 2-13.

Dye Fails To Teach Method As Recited In Claim 14

As noted above, Dye teaches an integrated memory controller, which includes advanced memory, graphics, and audio processing capabilities and performs pointer-based display list video operations. Col. 2, lines 47-49. The integrated memory controller sits on the main CPU bus or a high-speed system peripheral bus. Col. 2, lines 59-62. Thus, in general, Dye teaches a client computer interacting with a video monitor. Col. 1, lines 18-21.

Therefore, Dye teaches nothing about a parent frame including the first and second frames or storing indicators of lock states for the first and second frames to facilitate synchronizing of the first and second frames over the wide area network.

The Office Action cites the following passages of Dye as teaching Claim 1: col. 18, lines 45-49, col. 23, lines 15-50, col. 27, line 39 to col. 29, line 20, col. 41, lines 47-63. Col. 18, lines 45-49 teach that the integrated memory controller provides horizontal and vertical synchronization signals. Col. 23, lines 15-50 teach that driver software executing on the host CPU assembles and/or updates pointers in the Windows ID list, which includes a pointer for each window or object on the

screen. The driver software also determines and/or updates basic information about each window or object that is new or has changed, including information about the respective window's position. The driver software also assembles and/or updates a Windows Workspace list or buffer in the system memory through the integrated memory controller, which includes a windows workspace area comprising this information for each window. Col. 27, line 39 to col. 29, line 20 teach operations performed by the video driver software when a window position changes, operations performed by the video driver software when a change in window display priority occurs, window scrolling, and secondary window overlay. Specifically, the Office Action characterizes the Windows workspace as the parent frame and the foreground and background as the first and second frames.

Applicant traverses this characterization of the first and second frames. The foreground and background having nothing to do with configuring generic client software. Moreover, a plurality of commands and a plurality of variables are not stored in the Windows Workspace. Additionally, the secondary windows ID list is not displayed in either the foreground or the background. Nor are the horizontal and vertical synchronization signals used in synchronizing the foreground and background over the wide area network. Applicant further notes that Dye also fails to disclose or suggest storing indicators of lock states for the first and second frames.

Because none of these passages disclose or suggest Applicant's recited method, Applicant requests reconsideration and withdrawal of the rejection of Claim 14.

Claims 17-25 depend from Claim 14 and therefore are patentable for at least the reasons presented for Claim 14. Based on these reasons, Applicant requests reconsideration and withdrawal of the rejection of Claims 17-25.

CONCLUSION

Claims 1-14 and 17-25 are pending in the present application. Allowance of these claims is respectfully requested.

If there are any questions, please telephone the undersigned at 408-451-5907 to expedite prosecution of this case.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Jeanette S. Harms', is written over a horizontal line.

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